



\*\*FILE\*\*ID\*\*BASENDGSB

BBBBBBBBBB	AAAAAA	SSSSSSS	EEEEE	NN	NN	DDDDDDDD	GGGGGGGG	SSSSSSS	BBBBBBBB
BBBBBBBBBB	AAAAAA	SSSSSSS	EEEEE	NN	NN	DDDDDDDD	GGGGGGGG	SSSSSSS	BBBBBBBB
BB BB AA AA	AA	SS	EE	NN	NN	DD DD	GG	SS	BB BB
BB BB AA AA	AA	SS	EE	NNNN	NN	DD DD	GG	SS	BB BB
BB BB AA AA	AA	SS	EE	NNNN	NN	DD DD	GG	SS	BB BB
BB BB AA AA	AA	SS	SSSSS	NN NN	NN	DD DD	GG	SS	BB BB
BB BB AA AA	AA	SS	EEEEE	NN NN	NN	DD DD	GG	SSSSS	BBBBBBBB
BB BB AA AA	AA	SS	EEEEE	NN NN	NN	DD DD	GG	SSSSS	BBBBBBBB
BB BB AAAAAAAAAA	A	SS	EE	NN NNNN	DD	DD	GG	GGGGG	S, BB BB
BB BB AAAAAAAAAA	A	SS	EE	NN NNNN	DD	DD	GG	GGGGG	SS BB BB
BB BB AA AA	AA	SS	EE	NN NN	DD	DD	GG	GG	SS BB BB
BB BB AA AA	AA	SS	EE	NN NN	DD	DD	GG	GG	SS BB BB
BB BB AA AA	AA	SS	SSSSSSS	EEEEE	NN	NN DDDDDDD	GGGGGG	SSSSSSS	BBBBBBBB
BB BB AA AA	AA	SS	EEEEE	NN	NN DDDDDDD	GGGGGG	SSSSSSS	BBBBBBBB	....

LL	IIIIII	SSSSSSS
LL		SSSSSSS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SSSSS
LL	II	SSSSS
LL	II	SS
LL	II	SS
LL	II	SS
LLLLLLLLLL	IIIIII	SSSSSSS
LLLLLLLLLL	IIIIII	SSSSSSS

```
1 0001 0 MODULE BAS$END_GSB (
2 0002 0           IDENT = '1-002'
3 0003 0           ) =
4 0004 1 BEGIN
5 0005 1 ****
6 0006 1 *
7 0007 1 *   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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25 0025 1 *
26 0026 1 *
27 0027 1 ****
28 0028 1 *
29 0029 1 *
30 0030 1 *
31 0031 1 ++
32 0032 1   FACILITY: BASIC-PLUS-2 Frame Support
33 0033 1 *
34 0034 1   ABSTRACT:
35 0035 1 *
36 0036 1     These routines set up and tear down frames for BASIC-PLUS-2.
37 0037 1     Frames are used for main routines, external functions,
38 0038 1     external subroutines, internal functions (both DEFs and DEF*s)
39 0039 1     internal subroutines (GOSUBs) and condition handlers.
40 0040 1 *
41 0041 1   ENVIRONMENT: VAX-11 user mode
42 0042 1 *
43 0043 1   AUTHOR: John Sauter, CREATION DATE: 10-Oct-78
44 0044 1 *
45 0045 1   MODIFIED BY:
46 0046 1 *
47 0047 1     1-001 - Original.
48 0048 1     1-002 - Change BAS$ to BSFS prefix for BASIC stack frame. JBS 08-FEB-1979
49 0049 1   --
50 0050 1 *
51 0051 1 !<BLF/PAGE>
```

```
53 0052 1 | SWITCHES:  
54 0053 1 |  
55 0054 1 |  
56 0055 1 |  
57 0056 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);  
58 0057 1 |  
59 0058 1 |  
60 0059 1 | LINKAGES:  
61 0060 1 |  
62 0061 1 |  
63 0062 1 |  
64 0063 1 |  
65 0064 1 |  
66 0065 1 |  
67 0066 1 |  
68 0067 1 |  
69 0068 1 | TABLE OF CONTENTS:  
70 0069 1 |  
71 0070 1 |  
72 0071 1 | FORWARD ROUTINE  
73 0072 1 |  
74 0073 1 |  
75 0074 1 |  
76 0075 1 | INCLUDE FILES:  
77 0076 1 |  
78 0077 1 |  
79 0078 1 | REQUIRE 'RTLIN:RTLPSECT';           ! macros for defing psects  
80 0173 1 |  
81 0174 1 | REQUIRE 'RTLIN:BASFRAME.REQ';      ! Define frame structure  
82 0377 1 |  
83 0378 1 |  
84 0379 1 | MACROS:  
85 0380 1 |  
86 0381 1 |  
87 0382 1 |  
88 0383 1 | EQUATED SYMBOLS:  
89 0384 1 |  
90 0385 1 |  
91 0386 1 |  
92 0387 1 | PSECTS:  
93 0388 1 |  
94 0389 1 | DECLARE_PSECTS (BAS);          ! Declare psects for BAS$ facility  
95 0390 1 |  
96 0391 1 | OWN STORAGE:  
97 0392 1 |  
98 0393 1 |  
99 0394 1 |  
100 0395 1 | EXTERNAL REFERENCES:  
101 0396 1 |  
102 0397 1 |  
103 0398 1 | EXTERNAL ROUTINE  
104 0399 1 |  
105 0400 1 |  
106 0401 1 |  
107 0402 1 |  
108 0403 1 |  
109 0404 1 |  
     The following are the error codes used in this module.  
     +  
     -
```

BASEND\_GSB  
1-002

N 6  
16-Sep-1984 00:22:52      VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 11:54:56      [BASRTL.SRC]BASENDGSB.B32;1

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(2)

: 110      0405 1 EXTERNAL LITERAL  
: 111      0406 1      BASSK\_RETWITGOS : UNSIGNED (8);      ! RETURN without GOSUB  
: 112      0407 1

```
: 114      0408 1 GLOBAL ROUTINE BAS$END_GSB_R8           ! end of GOSUB frame
: 115      0409 1 : NOVALUE BASSINIT_LINR =
: 116      0410 1
: 117      0411 1 ++
: 118      0412 1 FUNCTIONAL DESCRIPTION:
: 119      0413 1
: 120      0414 1     Check a BASIC-PLUS-2 RETURN statement to be sure that
: 121      0415 1     the return is being made from a GOSUB. This is needed
: 122      0416 1     since GOSUB has no lexical scope.
: 123      0417 1
: 124      0418 1 FORMAL PARAMETERS:
: 125      0419 1
: 126      0420 1     NONE
: 127      0421 1
: 128      0422 1 IMPLICIT INPUTS:
: 129      0423 1
: 130      0424 1     The frame, as set up by BASSINIT_GSB_R8.
: 131      0425 1
: 132      0426 1 IMPLICIT OUTPUTS:
: 133      0427 1
: 134      0428 1     NONE
: 135      0429 1
: 136      0430 1 ROUTINE VALUE:
: 137      0431 1
: 138      0432 1     NONE
: 139      0433 1
: 140      0434 1 COMPLETION CODES:
: 141      0435 1
: 142      0436 1     NONE
: 143      0437 1
: 144      0438 1 SIDE EFFECTS:
: 145      0439 1
: 146      0440 1     May signal an error
: 147      0441 1
: 148      0442 1 --
: 149      0443 1
: 150      0444 2 BEGIN
: 151      0445 2
: 152      0446 2 BUILTIN
: 153      0447 2     FP;
: 154      0448 2     SP;
: 155      0449 2
: 156      0450 2 REGISTER
: 157      0451 2     FMP : REF BLOCK [0, BYTE] FIELD (BSF$FC0);
: 158      0452 2
: 159      0453 2 ++
: 160      0454 2     Give an error message if this RETURN does not correspond to
: 161      0455 2     a GOSUB.
: 162      0456 2
: 163      0457 2     FMP = .FP;
: 164      0458 2
: 165      0459 2     IF (.FMP [BSF$B_PROC_CODE] NEQ BSF$K_PROC_GOSB) THEN BAS$STOP (BASSK_RETWTGOS);
: 166      0460 2
: 167      0461 2 ++
: 168      0462 2     All is ok, return to the compiled code, which will issue a
: 169      0463 2     RET instruction to return to the caller of BASSINIT_GOSUB.
: 170      0464 2
```

: 171 0465 1 END;

!of BAS\$END\_GSB\_R8

.TITLE BAS\$END\_GSB  
.IDENT \1-002\

.EXTRN BAS\$STOP, BASSK\_RETWITGOS

.PSECT \_BASSCODE,NOWRT, SHR, PIC,2

50	SD	DO 00000 BAS\$END_GSB_R8::	
06	E5	A0 91 00003	MOV[ FP FMP
		0B 13 00007	CMPB -27(FMP), #6
00000000G	7E	00G 8F 9A 00009	BEQL 1\$
		01 FB 0000D	MOVZBL #BASSK_RETWITGOS, -(SP)
		05 00014 1\$: RSB	CALLS #1, BAS\$STOP

: 0457  
: 0459  
: 0465

: Routine Size: 21 bytes. Routine Base: \_BASSCODE + 0000

: 172	0466	1
: 173	0467	1 END
: 174	0468	1
: 175	0469	0 ELUDOM

## PSECT SUMMARY

Name	Bytes	Attributes
_BASSCODE	21	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

## COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:BASENDGSB/OBJ=OBJ\$:BASENDGSB MSRC\$:BASENDGSB/UPDATE=(ENH\$:BASENDGSB )

: Size:	21 code + 0 data bytes
: Run Time:	00:02.8
: Elapsed Time:	00:06.8
: Lines/CPU Min:	10158
: Lexemes/CPU-Min:	29068
: Memory Used:	29 pages
: Compilation Complete	

0022 AH-BT13A-SE  
VAX/VMS V4.0

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